MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Riegsecker Hardwoods
5660 N. SR 5
Shipshewana, Indiana 46565

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 087-13688-00015	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary custom furniture manufacturing plant.

Authorized Individual:	Greg Miller
Source Address:	5660 N. SR 5, Shipshewana, IN 46565
Mailing Address:	P.O. Box 220, Shipshewana, IN 46565
Phone Number:	(219) 768-7050
SIC Code:	2449
County Location:	LaGrange
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

(a) One (1) surface coating spray booth, identified as B1, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F1;

(b) One (1) surface coating spray booth, identified as B2, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F2;

(c) One (1) surface coating spray booth, identified as B3, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F3;

(d) One (1) surface coating spray booth, identified as B4, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F4;

(e) One (1) woodworking operation, consisting of various woodworking equipment equipped with two (2) baghouses for particulate matter control;

(f) One (1) wood part assembly area, used for cutting wood parts and for adhesive application;

(g) One (1) natural gas fired forced air furnace, identified as H1, with a maximum heat input rate of 0.80 million (MM) British thermal units (Btu) per hour;

(h) Four (4) natural gas fired space heaters, identified as H2 through H5, each with a

maximum heat input rate of 0.2 MMBtu/hr, 0.1 MMBtu/hr, 0.15 MMBtu/hr and 0.16 MMBtu/hr, respectively;

(i) One (1) natural gas fired boiler, identified as H6, with a maximum heat input rate of 0.232 MMBtu/hr; and

(j) One (1) natural gas fired air make up unit, identified as H7, with a maximum heat input rate of 3.575 MMBtu/hr.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years form the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain Preventive Maintenance Plans (PMP), including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall

submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the

date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(b) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(d) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description
(a) One (1) surface coating spray booth, identified as B1, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F1;
(b) One (1) surface coating spray booth, identified as B2, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F2;
(c) One (1) surface coating spray booth, identified as B3, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F3; and
(d) One (1) surface coating spray booth, identified as B4, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F4.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

Airmix Kremlin Model MX is an accepted alternative method of application of Air Assisted Airless Spray Application. Booth 2 and Booth 3 use Airmix Kremlin Model MX.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the four (4) surface coating spray booths (B1, B2, B3 and B4) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) surface coating spray booths (B1, B2, B3 and B4) are in operation.

D.1.5 Monitoring

(a) The Permittee shall implement an operator-training program.

(1) All operators that perform spray operations or booth maintenance shall be trained in the proper set-up and operation of the particulate matter control system. All existing operators shall be trained within 60 days of the issuance of this permit. All new operators shall be trained upon hiring or transfer.

(2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.

(3) All operators shall be given refresher training annually.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description
(e) One (1) woodworking operation, consisting of various woodworking equipment equipped with two (2) baghouses for particulate matter control; and
(f) One (1) wood part assembly area, used for cutting wood parts and for adhesive application.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall not exceed 1.28 pounds per hour when operating at a process weight rate of 350 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Particulate Matter (PM)

The dust collectors (DC 1 and DC 2) for PM control shall be in operation at all times when the woodworking operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.5 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.6 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4 and the dates the vents are redirected.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 Emissions unit OPERATION CONDITIONS

Emissions Unit Description
(g) One (1) natural gas fired forced air furnace, identified as H1, with a maximum heat input rate of 0.80 million (MM) British thermal units (Btu) per hour;
(h) Four (4) natural gas fired space heaters, identified as H2 through H5, each with a maximum heat input rate of 0.2 MMBtu/hr, 0.1 MMBtu/hr, 0.15 MMBtu/hr and 0.16 MMBtu/hr, respectively;
(i) One (1) natural gas fired boiler, identified as H6, with a maximum heat input rate of 0.232 MMBtu/hr; and
(j) One (1) natural gas fired air make up unit, identified as H7, with a maximum heat input rate of 3.575 MMBtu/hr.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Boilers

Emission Limitations and Standards

D.3.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which have 10 MMBtu/hr heat input or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input. Therefore PM emissions from the 0.232 MMBtu/hr boiler shall be limited to 0.6 lb/MMBtu heat input.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Riegsecker Hardwoods
Address:	5660 N. SR 5
City:	Shipshewana, IN 46565
Phone #:	(219) 768-7050
MSOP #:	087-13688-00015

I hereby certify that **Riegsecker Hardwoods** is **9** still in operation.
9 no longer in operation.

I hereby certify that **Riegsecker Hardwoods** is
9 in compliance with the requirements of MSOP **087-13688-00015**.
9 not in compliance with the requirements of MSOP **087-13688-00015**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____ _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____
_

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____
_

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____
_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_
_____
_

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____
_____

PAGE 2 OF 2

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Minor Source Operating Permit (MSOP) Renewal

Source Name: Riegsecker Hardwoods
Source Location: 5660 N. SR 5, Shipshewana, IN 46565
SIC Code: 2449
County: LaGrange
Operation Permit No.: MSOP 087-13688-00015
Permit Reviewer: NH/EVP

On March 26, 2001, the Office of Air Quality (OAQ) had a notice published in the LaGrange Standard, LaGrange, Indiana, stating that Riegsecker Hardwoods had applied for a Minor Source Operating Permit (MSOP) for the operation of a custom furniture manufacturing plant. The notice also stated that OAQ proposed to issue a MSOP for this operation and provided information on how the public could review the proposed MSOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this MSOP should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit:

1. Condition B.5 (Permit Term) has been added to the permit.

B.5 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years form the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

2. The language in Condition C.2 (Preventive Maintenance Plan) has been revised.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall ~~prepare and~~ maintain Preventive Maintenance Plans (PMP) ~~after issuance of this permit~~, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

On April 23, 2001, Greg Miller, General Manager of Riegsecker Hardwoods submitted comments on the proposed MSOP. The summary of the comments and corresponding responses is as follows (**bolded** language has been added, the language with a ~~line~~ through it has been deleted):

Comment 1

Condition D.1.5(a)
I am concerned about the first sentence "Daily inspections shall be performed to verify the placement, integrity, and particle loading of the filters". I must presume that (paper) records must be kept of these "daily" inspections. This is not only an undue paper-work burden, but it exposes me to a technical violation should the spray operator fail to record the inspection on any given day.

Response 1

Condition D.1.5 has been replaced by an operator training program (refer to comment/response 2) thus the above comment is no longer necessary. No changes have been made to the permit as result of this comment.

Comment 2

It is my understanding that several of the larger companies (holding Part 70 permits) in our area have had this requirement replaced with an "Operator Training Program". Therefore, I propose that Condition D.1.5 be replaced with the following language:

(a) The Permittee shall implement an operator-training program.

(1) All operators that perform spray operations or booth maintenance shall be trained in the proper set-up and operation of the particulate matter control system. All existing operators shall be trained within 60 days of the issuance of this permit. All new operators shall be trained upon hiring or transfer.

(2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, list of trained operators and training records shall be maintained on site or available within 1 hour for

inspection by IDEM.

(3) All operators shall be given refresher training annually.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Response 2

An "Operator training program" can be used in lieu of the monitoring requirements listed in Condition D.1.5. The following changes have been made to Condition D.1.5.

D.1.5 Monitoring

~~(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (F1, F2, F3 and F4) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.~~

(a) The Permittee shall implement an operator-training program.

(1) All operators that perform spray operations or booth maintenance shall be trained in the proper set-up and operation of the particulate matter control system. All existing operators shall be trained within 60 days of the issuance of this permit. All new operators shall be trained upon hiring or transfer.

(2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, list of trained operators and training records shall be maintained on site or available within 1 hour for

inspection by IDEM.

(3) All operators shall be given refresher training annually.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Riegsecker Hardwoods
Source Location:	5660 N. SR 5, Shipshewana, IN 46565
County:	LaGrange
SIC Code:	2449
Operation Permit No.:	MSOP 087-13688-00015
Permit Reviewer:	NH/EVP

The Office of Air Quality (OAQ) has reviewed an application from Riegsecker Hardwoods relating to the operation of a custom furniture manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) surface coating spray booth, identified as B1, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F1;

(b) One (1) surface coating spray booth, identified as B2, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F2;

(c) One (1) surface coating spray booth, identified as B3, utilizing an airmix spray application system, coating a maximum of 6 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F3;

(d) One (1) surface coating spray booth, identified as B4, utilizing a HVLP spray application system, coating a maximum of 3 wood tables per hour, with dry filters for particulate matter overspray control, and exhausting through one (1) stack, identified as F4;

(e) One (1) woodworking operation, consisting of various woodworking equipment equipped with two (2) baghouses for particulate matter control;

(f) One (1) wood part assembly area, used for cutting wood parts and for adhesive application;

(g) One (1) natural gas fired forced air furnace, identified as H1, with a maximum heat input rate of 0.80 million (MM) British thermal units (Btu) per hour;

(h) Four (4) natural gas fired space heaters, identified as H2 through H5, each with a maximum heat input rate of 0.2 MMBtu/hr, 0.1 MMBtu/hr, 0.15 MMBtu/hr and 0.16 MMBtu/hr, respectively;

(i) One (1) natural gas fired boiler, identified as H6, constructed on January 7, 2000, with a maximum heat input rate of 0.232 MMBtu/hr; and

(j) One (1) natural gas fired air make up unit, identified as H7, with a maximum heat input rate of 3.575 MMBtu/hr.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new emission units during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration 087-3180-00015, issued on September 8, 1993;

(b) Exemption 087-4547-00015, issued on May 23, 1995;

(c) Registration 087-8827-00015, issued on September 9, 1997.

All conditions from previous approvals were incorporated into this permit.

There is a change in status from a registered source to a MSOP.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
DC 1	Woodworking	Exhausts into building	1.75	30,740	Ambient
DC 2	Woodworking	Exhausts into building	1	5,500	Ambient
F1	Booth 1	2.5	2.83	12,500	Ambient
F2	Booth 2	2.5	2.83	12,500	Ambient
F3	Booth 3	2.5	2.83	12,500	Ambient
F4	Booth 4	2.5	2.83	12,500	Ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 28, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	35.01
PM-10	35.12
SO_2	0.01
VOC	26.07
CO	1.65
NO_x	1.97

HAP's	Potential To Emit (tons/year)
Xylene	2.06
Toluene	1.17
Formaldehyde	0.23
Ethyl benzene	0.93
Cumene	0.20
MEK	0.26
Methanol	5.32
TOTAL	10.17

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10 and VOC is each equal to or greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-6.1-2, an operating permit is required.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	HAPs
Surface Coating (B1, B2, B3 and B4)	8.43	8.43	0.00	25.96	0.00	0.00	5.32	10.17
Woodworking	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion (H1, H2, H3, H4, H5, H6 and H7)	0.04	0.15	0.01	0.11	1.65	1.97	0.00	0.00
Total Emissions	8.76*	8.87*	0.01	26.07	1.65	1.97	5.32	10.17

* Total emissions after control

County Attainment Status

The source is located in LaGrange County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) LaGrange County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, emissions specified in this permit MSOP-087-13688-00015, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) The one (1) natural gas fired boiler, identified as H6, rated at 0.232 MMBtu per hour, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc), because the one (1) boiler has a maximum heat input rate of less than 10 MMBtu/hr.

(b) The National Emission Standards for Wood Furniture Manufacturing Operations 40 CFR 63, Subpart JJ, does not apply to the four (4) surface coating spray booths (B1, B2, B3 and B4), because this source has single HAP usage of less than 10 tons per year.

State Rule Applicability - Entire Source

326 IAC 2-4.1-1 (New Source Toxics Control)

The four (4) surface coating spray booths (B1, B2, B3 and B4) are not subject to 326 IAC 2-4.1-1 (New Source Toxic Control) because the single HAP usage is less than 10 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is located in LaGrange County and the potential to emit any criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which have 10 MMBtu/hr or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input or the emissions based on the following equation, whichever is lower.

$Pt = 1.09/Q^{0.26}$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 4.2 MMBtu/hr

$Pt = 1.09/0.232^{0.26} = 1.59$ lbs PM/MMBtu

Therefore, the PM emissions from the one (1) boiler (constructed on January 7, 2000), rated at 0.232 MMBtu per hour heat input shall be limited to 0.6 pounds per MMBtu heat input.

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the four (4) spray booths B1, B2, B3 and B4 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The dry filters shall be in operation at all times the four (4) spray booths B1, B2, B3 and B4 are in operation, in order to comply with this limit.

(b) The particulate matter (PM) from the woodworking operation shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

$E = 4.10\ (0.175)^{0.67} = 1.28$ lbs PM/hr

Based on the above equation, particulate matter emissions from the woodworking operation shall be limited to 1.28 pounds per hour for a maximum process rate of 350 pounds per hour.

Uncontrolled Compliance calculation:
(26.54 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 6.06 lbs PM/hr

Controlled Compliance calculation:
(0.29 tons PM/yr) * (yr/8,760 hrs) * (2,000 lbs/ton) = 0.07 lbs PM/hr

The woodworking operation will comply with the requirements of 326 IAC 6-3-2 by using dust collectors (DC 1 and DC 2) to control PM emissions.

326 IAC 8-2-12 (Wood Furniture and Cabinet coating)

The surface coating spray booths (identified as B1, B2, B3 and B4) are applicable to this rule because potential VOC emissions are greater than twenty-five (25) tons per year.

The surface coating applied to the wood tables shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system. Booth 1 and Booth 4 use HVLP spray application, therefore, the two (2) booths are in compliance with this rule.

Airmix Kremlin Model MX is an accepted alternative method of application of Air Assisted Airless Spray Application. Booth 2 and Booth 3 use Airmix Kremlin Model MX, therefore, the two (2) booths are in compliance with this rule.

Conclusion

The operation of this custom furniture manufacturing plant shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 087-13688-00015.**

Appendix A: Emission Calculations

Company Name: Riegsecker Hardwoods
Address City IN Zip: 5660 N. SR 5, Shipshewana, IN 46565
MSOP: 087-13688
Plt ID: 087-00015
Reviewer: NH/EVP

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity			
Pollutant	Surface Coating	Woodworking Operation	Natural Gas Combustion	**TOTAL**
PM	8.43	26.54	0.04	35.01
PM10	8.43	26.54	0.15	35.12
SO2	0.00	0.00	0.01	0.01
NOx	0.00	0.00	1.97	1.97
VOC	25.96	0.00	0.11	26.07
CO	0.00	0.00	1.65	1.65
total HAPs	10.17	0.00	0.00	10.17
worst case single HAP	5.32	0.00	0.00	5.32

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

	Emissions Generating Activity			
Pollutant	Surface Coating	Woodworking Operation	Natural Gas Combustion	**TOTAL**
PM	8.43	0.29	0.04	8.76
PM10	8.43	0.29	0.15	8.87
SO2	0.00	0.00	0.01	0.01
NOx	0.00	0.00	1.97	1.97
VOC	25.96	0.00	0.11	26.07
CO	0.00	0.00	1.65	1.65
total HAPs	10.17	0.00	0.00	10.17
worst case single HAP	5.32	0.00	0.00	5.32

Total emissions based on rated capacity at 8,760 hours/year, after control.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Riegsecker Hardwoods
Address City IN Zip: 5660 N. SR 5, Shipshewana, IN 46565
MSOP: 087-13688
Plt ID: 087-00015
Reviewer: NH/EVP

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
B1																
L-3596 English Stain	6.36	95.269%	0.00%	95.3%	0.00%	4.833%	0.05640	3.000	6.06	6.06	1.03	24.60	4.49	0.06	125.37	75%
AL-4821 Marketplace Stain	7.48	91.394%	0.00%	91.4%	0.00%	5.699%	0.05640	3.000	6.84	6.84	1.16	27.76	5.07	0.12	119.96	75%
AL-2468 Windsor Stain	7.27	71.512%	0.00%	71.5%	0.00%	18.584%	0.05640	3.000	5.20	5.20	0.88	21.11	3.85	0.38	27.98	75%
AL-4864 Washington Stain	7.98	78.790%	0.00%	78.8%	0.00%	12.401%	0.05640	3.000	6.29	6.29	1.06	25.53	4.66	0.31	50.70	75%
L-3699 Colonial Stain	6.49	95.021%	0.00%	95.0%	0.00%	3.035%	0.05640	3.000	6.17	6.17	1.04	25.04	4.57	0.06	203.19	75%
AL-5016 Dark Formal Cherry Stain	7.7	81.719%	0.00%	81.7%	0.00%	12.209%	0.05640	3.000	6.29	6.29	1.06	25.55	4.66	0.26	51.54	75%
PS-125 Wash thinner	6.97	100.000%	0.00%	100.0%	0.00%	0.000%	0.00240	3.000	6.97	6.97	0.05	1.20	0.22	0.00	ERR	75%
B2																
6540 L.H. Topcoat Resistovar	7.83	62.49%	0.00%	62.5%	0.00%	29.31%	0.05640	6.000	4.89	4.89	1.66	39.74	7.25	2.18	16.69	50%
1048 Catalyst	8.98	42.43%	0.85%	41.6%	0.92%	42.34%	0.05640	6.000	3.77	3.73	1.26	30.33	5.53	3.83	8.82	50%
PS-125 Wash thinner	6.97	100.00%	0.00%	100.0%	0.00%	0.00%	0.00240	6.000	6.97	6.97	0.10	2.41	0.44	0.00	ERR	50%
B3																
6540 L.H. Topcoat Resistovar	7.83	62.49%	0.00%	62.5%	0.00%	29.31%	0.05640	6.000	4.89	4.89	1.66	39.74	7.25	2.18	16.69	50%
1048 Catalyst	8.98	42.43%	0.85%	41.6%	0.92%	42.34%	0.05640	6.000	3.77	3.73	1.26	30.33	5.53	3.83	8.82	50%
PS-125 Wash thinner	6.97	100.00%	0.00%	100.0%	0.00%	0.00%	0.00240	6.000	6.97	6.97	0.10	2.41	0.44	0.00	ERR	50%
B4																
L-3596 English Stain	6.36	95.269%	0.0%	95.3%	0.0%	4.833%	0.05640	3.000	6.06	6.06	1.03	24.60	4.49	0.06	125.37	75%
AL-4821 Marketplace Stain	7.48	91.394%	0.0%	91.4%	0.0%	5.699%	0.05640	3.000	6.84	6.84	1.16	27.76	5.07	0.12	119.96	75%
AL-2468 Windsor Stain	7.27	71.512%	0.0%	71.5%	0.0%	18.584%	0.05640	3.000	5.20	5.20	0.88	21.11	3.85	0.38	27.98	75%
AL-4864 Washington Stain	7.98	78.790%	0.0%	78.8%	0.0%	12.401%	0.05640	3.000	6.29	6.29	1.06	25.53	4.66	0.31	50.70	75%
L-3699 Colonial Stain	6.49	95.021%	0.0%	95.0%	0.0%	3.035%	0.05640	3.000	6.17	6.17	1.04	25.04	4.57	0.06	203.19	75%
AL-5016 Dark Formal Cherry Stain	7.7	81.719%	0.0%	81.7%	0.0%	12.209%	0.05640	3.000	6.29	6.29	1.06	25.55	4.66	0.26	51.54	75%
PS-125 Wash thinner	6.97	100.000%	0.0%	100.0%	0.0%	0.000%	0.00240	3.000	6.97	6.97	0.05	1.20	0.22	0.00	ERR	75%
State Potential Emissions			**Add worst case coating to all solvents**								**5.93**	**142.23**	**25.96**	**8.43**		

Note: Coatings in each booth are mutually exclusive

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Riegsecker Hardwoods
Address City IN Zip: 5660 N. SR 5, Shipshewana, IN 46565
MSOP#: 087-13688
Plt ID: 087-00015
Permit Reviewer: NH/EVP

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethyl Benzene	Weight % Cumene	Weight % Methyl Ethyl Ketone	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Methanol Emissions (ton/yr)
B1																	
AL-4821 Marketplace Stain	7.48	0.056400	3.00	1.80%	0.00%	0.00%	0.00%	1.80%	0.00%	0.00%	0.10	0.00	0.00	0.00	0.10	0.00	0.00
AL-4864 Washington Stain	7.98	0.056400	3.00	1.40%	0.00%	0.00%	0.00%	1.40%	0.00%	0.00%	0.08	0.00	0.00	0.00	0.08	0.00	0.00
AL-5016 Dark Formal Cherry Stain	7.7	0.056400	3.00	1.50%	0.00%	0.00%	0.00%	1.50%	0.00%	0.00%	0.09	0.00	0.00	0.00	0.09	0.00	0.00
PS-125 Wash thinner	6.97	0.002400	3.00	0.00%	55.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00	0.12	0.00	0.00	0.00	0.04	0.00
B2																	
6540 L.H. Topcoat Resistovar	7.83	0.056400	6.00	8.00%	4.00%	1.00%	4.00%	0.00%	0.00%	0.00%	0.93	0.46	0.12	0.46	0.00	0.00	0.00
1048 Catalyst	8.98	0.056400	6.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	2.66
PS-125 Wash thinner	6.97	0.002400	6.00	0.00%	55.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00	0.24	0.00	0.00	0.00	0.09	0.00
B3																	
6540 L.H. Topcoat Resistovar	7.83	0.056400	6.00	8.00%	4.00%	1.00%	4.00%	0.00%	0.00%	0.00%	0.93	0.46	0.12	0.46	0.00	0.00	0.00
1048 Catalyst	8.98	0.056400	6.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	2.66
PS-125 Wash thinner	6.97	0.002400	6.00	0.00%	55.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00	0.24	0.00	0.00	0.00	0.09	0.00
B4																	
AL-4821 Marketplace Stain	7.48	0.056400	3.00	1.80%	0.00%	0.00%	0.00%	1.80%	0.00%	0.00%	0.10	0.00	0.00	0.00	0.10	0.00	0.00
AL-4864 Washington Stain	7.98	0.056400	3.00	1.40%	0.00%	0.00%	0.00%	1.40%	0.00%	0.00%	0.08	0.00	0.00	0.00	0.08	0.00	0.00
AL-5016 Dark Formal Cherry Stain	7.7	0.056400	3.00	1.50%	0.00%	0.00%	0.00%	1.50%	0.00%	0.00%	0.09	0.00	0.00	0.00	0.09	0.00	0.00
PS-125 Wash thinner	6.97	0.002400	3.00	0.00%	55.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00	0.12	0.00	0.00	0.00	0.04	0.00
Total State Potential Emissions											**2.06**	**1.17**	**0.23**	**0.93**	**0.20**	**0.26**	**5.32**

Total HAPs = **10.17**

Note: Coatings in each booth are mutually exclusive

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Process Particulate Emissions from Woodworking Operation

Company Name: Riegsecker Hardwoods
Address City IN Zip: 5660 N. SR 5, Shipshewana, IN 46565
MSOP: 087-13688
Plt ID: 087-00015
Reviewer: NH/EVP

Amount of sawdust collected by both dry collectors (tons/year)	**26.25**
Amount of sawdust collected by DC 1	**25.7**
Amount of sawdust collected by DC 2	**0.55**
Efficiency of emission control equipment (DC 1)	**99.00%**
Efficiency of emission control equipment (DC 2)	**95.00%**
Amount of sawdust entering DC 1 (tons/year)	**25.96**
Amount of sawdust entering DC 2 (tons/year)	**0.58**

Uncontrolled emissions (tons/year)	**26.54**
Controlled emissions (tons/year)	**0.29**

Methodology

Amount of sawdust entering DC 1 (tons/year) = Amount of sawdust collected by DC 1 / Efficiency of emission control equipment (DC 1)
Amount of sawdust entering DC 2 (tons/year) = Amount of sawdust collected by DC 2 / Efficiency of emission control equipment (DC 2)
Uncontrolled emissions (tons/year) = Amount of sawdust entering DC 1 (tons/year) + Amount of sawdust entering DC 2 (tons/year)
equipment
(DC 2))

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Riegsecker Hardwoods
Address City IN Zip: 5660 N. SR 5, Shipshewana, IN 46565
MSOP: 087-13688
Plt ID: 087-00015
Reviewer: NH/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.497	39.4

Facilities	MMBtu/hr
Forced Air Furnace (H1)	0.08
Space Heater (H2)	0.2
Space Heater (H3)	0.1
Space Heater (H4)	0.15
Space Heater (H5)	0.16
Boiler (H6)	0.232
Air Make Up (H7)	3.575
Total	**4.497**

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.04	0.15	0.01	1.97	0.11	1.65

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).